

TSC 100

Transcoder and Standards Converter



FEATURES

- Video standards converter from PAL to NTSC or NTSC to PAL
- Inputs: Composite video on a BNC with buffered loop-through, S-video on a 4-pin mini DIN with buffered loop-through
- Outputs: Composite video on a BNC, S-video on a 4-pin mini DIN
- Encodes S-video to composite video
- Decodes composite video to S-video
- Accepts NTSC 3.58, NTSC 4.43, PAL, and SECAM composite video or S-video
- Outputs NTSC 3.58 and PAL
- Factory aspect ratio presets for PAL and NTSC centering
- Front panel security lockout
- RS-232 serial control port
- Rack-mountable 1U, quarter rack width metal enclosure
- External universal power supply included, part # 70-777-01

DESCRIPTION

The Extron **TSC 100** Transcoder and Standards Converter accepts NTSC 3.58, NTSC 4.43, PAL, or SECAM composite video or S-video signals, and converts them to NTSC 3.58 or PAL composite video or S-video. The incoming video standard is auto-detected, and NTSC or PAL output is selected using the front panel buttons. A high quality, four-line adaptive comb filter performs the Y/C separation, virtually eliminating chroma noise.

Input selection, standard selection, and picture controls are accessible on the front panel of the TSC 100. The autoswitching feature allows any input to be selected automatically when a video sync signal is detected, making the TSC 100 ideal for automatic routing and unattended operation. Autoswitching can be activated or de-activated via RS-232. In addition, RS-232 allows the user to select full screen black or color bars as the output when no input is present after being selected. It also enables users to select three factory sizing options for scaling between NTSC and PAL video signals.

MODEL	VERSION DESCRIPTION	PART #	
TSC 100	Transcoder/Standards Converter	60-451-01	
OPTIONAL ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
RSU 129	1U 9.5" Deep Universal Rack Shelf Kit	page 858	60-190-01
RCAF-BNCM/10	RCA Female to BNC Male Adapter - Qty. 10	page 829	100-229-01
MHR-2 SVM-M/6	4-Pin Mini DIN Male to Male - 6' (1.8m)	page 824	26-316-02
SVHSM-BNCF 8" (20 cm)	S-Video Male to 2 BNC Female Adapter	page 833	26-353-01
SVHSM-BNCM 1' (30 cm)	S-Video Male to 2 BNC Male Adapters	page 833	26-353-02

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TSC 100

SPECIFICATIONS

VIDEO

Gain	Unity
Bandwidth	10 MHz (-3 dB)
Differential phase error	0.3° at 3.58 MHz and 4.43 MHz
Differential gain error	0.36% at 3.58 MHz and 4.43 MHz
Crosstalk	-60 dB @ 3.58 MHz

VIDEO INPUT

Number/signal type	1 NTSC/PAL S-video 1 NTSC/PAL composite video
Connectors	1 female 4-pin mini DIN 1 female BNC
Nominal level	1 Vp-p for Y of S-video and for composite video 0.3 Vp-p for C of S-video
Minimum/maximum level(s)	
S-video	Luma: 2 Vp-p Chroma: 0.6 Vp-p
Composite video	2 Vp-p with no offset
Impedance	75 ohms
Return loss	<-13 dB @ 5 MHz
DC offset (max. allowable)	1.5 V

VIDEO PROCESSING

Encoder	10 bit digital
Decoder	9 bit digital
Digital sampling	24 bit, 8 bits per color
Colors	16.78 million

VIDEO OUTPUT

Number/signal type	1 S-video and composite video (one buffered loop-through in the same format as the input, one converted output in the other format)
Connectors	1 female 4-pin mini DIN 1 female BNC
Nominal level	1 Vp-p for Y of S-video and for composite video 0.3 Vp-p for C of S-video
Minimum/maximum levels	0 V to 2.0 Vp-p
Impedance	75 ohms
Return loss	-30 dB @ 5 MHz
DC offset	±5 mV maximum

SYNC

Standards	
Sync input	NTSC 3.58, NTSC 4.43, PAL, SECAM
Sync output	NTSC 3.58, PAL

CONTROL/REMOTE — TRANSCODER/CONVERTER

Serial control port	RS-232, 9-pin female D connector
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations	
	2 = TX, 3 = RX, 5 = GND
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

GENERAL

External power supply	100 VAC to 240 VAC, 50/60 Hz, external; to 9 VDC, 1 A, regulated
Power input requirements	9 VDC, 0.70 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling	Convection, no vents
Mounting	
Rack mount	Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01)
Enclosure type	Metal
Enclosure dimensions	1.75" H x 4.4" W x 6.5" D (1U high, quarter rack wide) (4.4 cm H x 11.1 cm W x 16.5 cm D) (Depth excludes connectors and knobs.)
Product weight	0.8 lbs (0.4 kg)
Shipping weight	3 lbs (2 kg)

Note: For complete specifications, please go to www.extron.com

